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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,858	10/16/2003	Fumio Ohtomo	A36044	1724

21003 7590 03/01/2005

BAKER & BOTTS
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

ALSOMIRI, ISAM A

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 03/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/686,858

Applicant(s)

OHTOMO ET AL.

Examiner

Isam A Alsomiri

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Guggenguehl CH 676042 A5.

Re claim 1, Guggenguehl discloses in figures 1-2 a position measuring instrument that irradiates a reflector 2 with measuring light to determine a distance, a direction, and a position on the basis of its reflected light, said position measuring instrument comprising: a light source unit 14 for emitting measuring light S; a light receiving unit for receiving reflected light; scanning means that emits measuring light in a scanning direction while swinging, and that leads its reflected light to the light receiving unit; and an angle detector for detecting a rotational position of the scanning means (see Abstract, figure 2); wherein: said measuring light includes distance measuring light expanding in a fan-shaped manner; and a distance to the reflector is measured by its reflected light (see Abstract, col. 2 line 14 – col. 6 line 58).

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Re claim 2, Guggenguehl teaches the measuring light is emitted in a fan-shaped manner by a diffuse optical system provided on the scanning means, and then reflected light entered from the diffuse optical system is led to the light receiving unit (see figures 3-13).

Re claim 3, Guggenguehl teaches the measuring light includes collimation light; said light receiving unit has a collimation-use light receiving sensor for receiving the collimation light; and said collimation-use light receiving sensor detects a collimation center and a deviation of the reflector by the reflected light (see col. 2 line 14 – col. 6 line 58).

Re claim 4, Guggenguehl teaches plurality of reflectors can be measured.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guggenguehl CH 676042 A5 in view of Aeschlimann US 4,681,433.

Re claim 5, Guggenguehl is silent about transmitting to the measured reflector measured data relating to the reflector measured data relating to each reflector is transmitted to each reflector). However, transmitting data back to a reflector (for example a cooperative target, or a station) is well known. Aeschlimann teaches a device to measure a relative position of a target, and transmitting the detected data to the target (see col. 3 line 34 – col. 5 line 8, figure 4).

Claims 7-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Guggenguehl CH 676042 A5 in view of Aeschlimann US 4,681,433 as applied to claim 5 above, and further in view of anyone of Hinderling et al. US006411371B1 or Hinderling US006504602B1 or Guggenguehl CH 676041 A5.

The combination of Guggenguehl and Aeschlimann teaches detecting a position of a device (data) and transmitting the data to the target. However, the combination does not teach the light receiving unit comprises an imager, and transmits image data detected by this imager to the reflector. However, detecting images are well known and are commonly combined in theodolites. Hinderling '371 teaches a similar system including taking image data also (see figure 7 [13]); Hinderling '602 also teaches image data (see figure 2 [27]), and Guggenguehl '041 teaches "images the received light pulse on a light responsive array 41" see (translation of Abstract). Therefore, it have been obvious to modify the combination to include obtaining image data of the target for showing the exact position of the target relative to the theodolites; furthermore, since the combination already teaches transmitting the detected information to the target, it would also be obvious to send the image position data to the target as well to show the exact position of the target relative to the theodolites.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam A Alsomiri whose telephone number is 703-305-5702. The examiner can normally be reached on Monday-Thursday and every other Friday (8:30-5:00).

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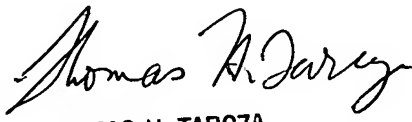
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H Tarcza can be reached on 703-306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isam Alsomiri



February 22, 2005



THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600